Introduction to FMJ08 gas mask

In 1986, the S10 entered mass production. The following year, the FMJ05, or Type 87 gas mask, was finalised. In 1997, the FMJ08, which closely resembled the S10, debuted as a "supporting equipment item for the 97th troops entering Hong Kong and the 99th troops entering Macau." In some sources, it's referred to as the Type 97. The FMJ08 can be considered a combination of the S10, the domestically produced FMJ03, and the FMJ05. Early online articles claim it was produced using the imported S10 production line. The FMJ08 is very similar to the S10, with a gas filter similar to the FMJ05's. It also uses the FMJ03/05's exhalation valve-talkie combination, differing only in colour and cover. Many sources falsely claim the FMJ08's exhalation valve is derived from the Swedish Forsheda F2 or the Czech CM-7M.

S10

F2

*CM-7M (OM-90)

*The original author got the name wrong. The correct name is OM-90.

FMJ08

Like the FMJ05, the FMJ08 was originally produced by Factory 908, but later, multiple manufacturers offered similar or modified versions. Ignoring brand, workmanship, and details, these products primarily include the standard FMJ08/MF22/MF20B, the non-drinking, single-canister MF20, and the dual-canister MF20C. The naming of products other than the true FMJ08 is generally irregular. The MF20 and MF20C are no longer traceable. For those named with the MF designation, please refer to the actual product.

The FMJ08 comes in three sizes: small, medium, and large, marked 1, 2, and 3, respectively. Users need to measure their face with a fitting ruler to select the appropriate mask. Details on fitting methods and fitting rulers are available in the FMJ05 article; both are interchangeable. The mask consists of a body and a water-blocking shield. Like the S10, these are made of chlorobutyl rubber and silicone rubber, respectively. The specific formulations have been refined over the years. Chlorobutyl rubber provides chemical protection but is irritating, making it unsuitable for some wearers. Silicone is skin-friendly but has poor chemical resistance and is only used as a water-blocking shield. The mask has a folded edge to enhance airtightness and a raised edge to fit over chemical protective clothing. The experimental model is simpler, similar

to the FMJ05. Documents indicate that the body and components were hand-assembled for at least 13 years after production began to ensure quality. The window frame is perfectly round, but the three-dimensional polyester lens creates a double-layered illusion. Some genuine versions are reportedly coated. The mask should be stored in a cool, dry place away from organic solvents, avoiding any folding.

Aside from the canister, one of the biggest differences between the FMJ08 and the S10 is the exhalation valve and intercom. The FMJ08 retains the exhalation valve-intercom combination that existed in 1965 and was used by the 65, 64, and FMJ05 (see the FMJ02 article for details). Therefore, its protective cover is different and incompatible with the S10, and the water dispenser is also integrated below the exhalation valve. If you want to copy the S10, you can purchase a 3D-printed replacement cover. The FMJ08 retains the S10's electric and acoustic jack, which is lined with a small intercom membrane.

The mask operates as follows. During inhalation, clean air passes through the threaded interface and the inhalation valve of the water-blocking shield, flushing the lens to prevent fogging and re-entry. The exhalation valve closes to prevent contaminants from being inhaled. During exhalation, the inhalation valve closes to prevent moisture from fogging the lens and the canister from getting wet, and the exhalation valve opens to expel waste gas.

The FMJ08 is my country's first mass-produced mask equipped with a drinking device. Drinking requires the use of a chemical-resistant water bottle cap and a special water bottle. Compatible water bottles include the small-mouth Type 87, the later coarse-threaded Type 65, the Vietnam-support Type 65, the Type 83, and the similar paratrooper-style Type 65. Detailed information and reviews are available online. To drink, first hold the mask steady with one hand while removing the water hose plug from the mask. Then, open the bottle cap and insert the water hose. Turn the water hose valve counterclockwise half a turn, and the linked water outlet will move to the center of the water-blocking shield. Then, invert the bottle and place it near the mask, bringing the mouth of the bottle to eye level. Finally, blow into the hose to force out the water. Both the plug and the cap have check valves, ensuring a flow only when they are squeezed together. However, many people's plugs won't even secure to the cap, so your mask may not be suitable for drinking. If you're looking for a mask that allows drinking, the PMK-2 might be a more reliable choice.

The FMJ08 comes standard with an "FMJ08 gas filter," similar to the FMJ05, featuring both a smoke and gas filter. Regarding performance, Wikipedia claims the FMJ08 was initially equipped with the ZB-R2-V gas filter, and later with the ZB-P2-2. This claim is questionable. Since the origin of "FMJ08" canisters on the market is difficult to determine, it's recommended to purchase a reputable brand instead.

The resistance gauge simulates the air resistance of a canister during training and is shaped differently from the FMJ05. The bag retains the "FMJ05 mask bag" design, and the mask case has also changed the FMJ05 designation to FMJ08. See the FMJ05 article for details.

The FMJ08's workmanship and functionality surpass those of previous masks, but its weight and folded edges reduce comfort. The later 09a and 010 models both eliminated the drinking tube, focusing on a simple design, wide field of view, and comfort. Products like the FMJ08 are significantly overpriced, so if you're only interested in practicality, it's best to purchase other masks from reputable vendors with reliable after-sales service.

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